

Outline Case Study



Burys Court School, Reigate, Surrey.

Site: An stunning Victorian mansion built to a high standard but lacking modernisation. The building covers approximately 1353m²

Challenges: To develop an energy master plan to support renewable energy and low carbon policies to protect the school from sharp rises in fossil fuel prices and dramatically cut carbon emissions.

The heating is currently provided by electricity with some limited gas hot water and individual gas fires. It is estimated that about 80% of the schools electricity consumption comes from spatial heating.

The school currently consumes in excess of 99,000kWh of electricity per annum. This is lower than it should be as there is no heating in many parts of the building.

Solution: Loft insulation via 300m Thermafleece Wool battens.

Spatial heating and hot water for the main building via 2 x 30kW Ground Source Heat Pumps.

Source taken from a 2400m surface soil horizontal collector field under the playing fields.

Install a wet radiator system to work in conjunction with the proposed ground source heat pumps.

Solar Collectors (16 m²) to provide hot water

Outdoor pool heating via 1 x 14kW Air Source Heat Pump.

Isoenergy assistance with multiple grant applications.



Note: Project awaiting grant applications. (June 2009)